

NOTES ON A SECOND COLLECTION OF MARINE SHELLS FROM
THE ANDAMAN ISLANDS, WITH DESCRIPTIONS OF NEW
FORMS OF *TEREBRA*.

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PLATE III.

SINCE our first paper on the subject,¹ in which ninety-seven species, forwarded by Mr. G. H. Booley, of Port Blair, were enumerated, we have received several consignments from the same careful and enterprising collector, mostly containing specimens differing specifically from those in the earlier parcels: these we now proceed to enumerate. Mr. Booley has been directing his attention to particular genera, and it will be seen that *Oliva*, *Terebra*, and *Nassa* predominate in the present paper.

We put forward these lists on the supposition that any additions to the meagre details hitherto published of the exceptionally rich molluscan fauna of the Andaman Islands must prove of unusual interest, seeing that those islands are situated in the centre of the Bay of Bengal, and cannot fail to present an almost exhaustless field for research. This list includes 215 species, and of these, two species of *Terebra*, as well as marked varieties of *T. crenulata* and *T. nitida*, are considered new to science. We should add that a few of the species did not come from Mr. Booley, but were collected some years ago by Mr. J. R. Henderson, of Madras, and are now in the Manchester Museum, Owens College. We thought it a good opportunity to include these also in the present communication, in order that the records might be made as complete as possible, although the attainment of this desired end can only be reached by degrees.

We have further taken this opportunity of figuring the operculum of *Ancilla Booleyi*, Melv. & Sykes² (Pl. III, Fig. 7).

Having received additional specimens of *Turritella leptomita*, Melv. & Sykes,³ we think it right to call attention to the possibility of its eventually proving a variety of the *Eglisia tricarinata*, Adams & Reeve, described and figured in the Voyage of the "Samarang," and refigured here (Pl. III, Fig. 6) for comparison. While differing from the large and, presumably, type specimen in the British Museum (Natural History), closer affinity appears on comparison with two smaller specimens mounted on the same tablet. The "type" has five carinæ at least on the last whorl, and

¹ Proc. Malac. Soc., vol. ii, p. 164.

² T.c., p. 166.

³ T.c., p. 171.

"*tricarinata*" is therefore an inappropriate name. We may note that the type of *Eglisia* appears to be *E. spirata*, Sby.: some authors have transferred the genus to the Scalariidae.

By an error the *Natica Raynaudiana*, Récluz, appeared in our former list as *N. Raynoldiana*.

As in our previous paper, we have distinguished the species already recorded by Mr. E. A. Smith¹ by an asterisk. The initials J. R. H. stand for Mr. Henderson.

1. *FUSUS BLOSVILLEI*, Desh. These specimens possess their opercula, and are larger than examples from Manila. By some authors this species is included in the genus *Afer* (Conr.) with the African species *F. afer*, Gmelin, for the type.

2. *FUSUS LONGICAUDA*, Lam. A Ceylonese shell, which, therefore, now has its known range extended northwards. The species has always been credited to Bory de St. Vincent, but this is an error. (Vide Proc. Zool. Soc., 1893, p. 584.)

3. *FUSUS*, sp. A large, massive shell, much ribbed and tuberculate, broader than *F. Nicobaricus* or *F. laticostatus*. We await more examples before giving any further description.

4. *PLEUROTOMA ALBINA*, Lam. A small variety. Its headcentre lies in the Moluccas and Spice Islands.

5. *PLEUROTOMA MARMORATA*, Lam. A pretty, small form of this widely-distributed mollusc.

6. *CLAVUS UNIZONALIS*, Lam. Appears to be very closely related to, if not identical with, *C. vidua*, Reeve.

7. *MUREX FUSCUS*, Dunker. A specimen collected by Mr. J. R. Henderson has lately come to our notice.

8. *MUREX TRIQUETER*, Born. The variety *Cumingii*, A. Ad.

9. *AQUILLUS (SIMPULUM) GEMMATUS*, Reeve. Not particularly characteristic, but simulating the Philippine Island form very closely. One of us² has lately given reasons for the preference of the name *Aquillus* to *Lotorium* (both of Montfort) as superseding the old term *Triton*.

10. *AQUILLUS (GUTTURNIUM) EXILIS*, Reeve. Extends to Zebu Island.

11. *AQUILLUS (GUTTURNIUM) MONILIFER*, Ad. & Reeve. A variety. Extends to China, whence the type was described.

12. *AQUILLUS (GUTTURNIUM) PFEIFFERIANUS*, Reeve. Another Chinese and Philippine Island species, with wide range westward.

13. *AQUILLUS (GUTTURNIUM) SINENSIS*, Reeve. The type, as its name implies, comes from China.

14. *AQUILLUS (COLUBRARIA) BRACTEATUS*, Hinds. Superficially like one of the Pleurotomidae. It is a small species of wide distribution,

¹ Proc. Zool. Soc., 1878, pp. 804-821, pl. L.

² Journ. of Conch., vol. viii, p. 469, 1897.

occurring in most collections from the East which we have examined of late years. The Andaman Island form is large in proportion, and well marked with thick dots and dashes.

15. *AQUILLUS* (*COLUBRARIA*) *OBSCURUS*, Reeve. Received as Andamane, from Mr. J. R. Henderson.

16. *AQUILLUS ENCAUSTICUS*, Reeve.

17. *GYRINEUM* (*APOLLON*) *BITUBERCULARE*, Lam. Two specimens, agreeing with individuals from the East Indies.

18. *GYRINEUM* (*BURSA*) *ELEGANS*, Beck. Also reported from the Nicobar Islands.

19. *BULLIA* (*DORSANUM*) *VITTATA*, L. This species having its headquarters in Ceylon, the present record constitutes a north-eastward extension of its range.

20. *NASSA ARCULARIA*, L. A well-grown form, but of smoother surface dorsally than is usual. The callosity round the lip is likewise not so pronounced. Another form also occurs, dark cinereous, with a single dorsal band.

21. *NASSA CORONATA*, L. Chiefly distinguished from the above species (*N. arcularia*) by the complete smoothness and polished condition of the upper whorls, and polished rounded nodules just below the suture on the (often white-flecked) dorsal surface of the last whorl. We consider these characters constant, and that the species is not conspecific with the nearly allied and commoner one, so often associated with it. *N. coronata* has its headquarters, perhaps, in Madagascar, but ranges far to the eastward, being reported from all the East Indian Islands, including, of course, the Philippines. We have also seen Andaman specimens collected by Mr. J. R. Henderson.

22. **NASSA* (*ARCULARIA*) *BIMACULOSA*, A. Ad. Very abundant, and quite constant. We do not agree with Tryon¹ that this should be merged in *N. Thersites* (Brug.), for, though gibbous, the smoothness, comparatively speaking, of the dorsal surface, and especially the twin spots just behind the outer lip, that suggested, no doubt, the specific name, are quite characteristic.

23. *NASSA* (*ARCULARIA*) *CALLOSA*, A. Ad. Not a very frequent form, somewhat resembling the preceding species in miniature. *N. callospira*, A. Ad., is synonymous.

24. *NASSA* (*ARCULARIA*) *IMMERSA*, Carp. There seems to be some confusion with respect to this species: Tryon unhesitatingly gives it as a variety of *N. bimaculosa*, A. Ad., which, as just observed above, he then merges in *N. Thersites*, Brug. The principal point of resemblance appears to us to consist in the twin dark spots behind the outer lip. These also occur in *N. callosa*. In Paetel's Catalogue, California is given as a locality for this, but surely in error.

¹ Man. Conch., ser. I, vol. iv, p. 25.

N. immersa seems to us unconnected by any exactly intermediate stage with *N. Thersites*, *N. bimaculosa*, or *N. callosa*, though, of course, coming next in sequence. The callosity extends, as in *N. gibbosula*, L., *N. circumcincta*, A. Ad., *N. Kraussiana*, Dunker, over the apex and lateral margins of the shell, and in our opinion it constitutes a good species.

25. *NASSA* (*ALECTRION*) *CRENULATA*, Reeve (*an Brugière?*). We are not sure whether this specific name, as having been relegated to obscure synonymy three or four times over, should not be abandoned. Our specimens agree with those in the British Museum (Natural History) labelled *N. crenulata*, Brug. Comparisons with the figures in Reeve's *Conch. Icon.* and Tryon's *Manual* lead us to suppose a slighter form than our individuals, but at all events we think it best to leave them thus for the present.

26. *NASSA* (*ALECTRION*) *NODIFERA*, Powis. An allied form to the preceding, and merged as the above into *N. hirta*, Kiener, by Tryon.

27. *NASSA* (*HEBRA*) *SUBSPINOSA*, Lam. Typical. With this we observe Tryon¹ includes *N. sistroidea*, G. & H. Nevill, which found a place in our first list;² but Mr. Booley has now sent many freshly dredged specimens in a more mature condition, and we consider them sufficiently distinct.

28. **NASSA* (*HEBRA*) *HORRIDA*, Dunker. Considered by Tryon a variety only of *N. muricata*; but, though allied, we can always distinguish it.

29. **NASSA* (*ZEUXIS*) *LURIDA*, Gould (= *N. dispar*, A. Ad.). Placed under *N. picta*, Dunker, by Tryon.³ Though no doubt belonging to a very variable assemblage, we can always detect this form without difficulty. Taken collectively, this series of closely allied shells ranges throughout the whole Eastern tropics.

30. *NASSA* (*ZEUXIS*) *LENTIGINOSA*, A. Ad., var. *PUNCTATA*, A. Ad. Here, again, some difficulty as to limitation of forms prevails. Is *N. punctata* different from *N. lentiginosa*? We think not. Tryon, we observe,⁴ merges not only these, but a host of other smooth forms (even including *N. Marratii*, Smith, which is surely a distinct Andamanese shell), under *N. gaudiosa*, Hinds.

31. *NASSA* (*HIMA*) *CONCINNA*, Powis. A pretty variety. We have seen this species from many tropical Eastern localities. A remarkably large specimen from Lifu has just come under our notice, about twice the size usually seen.

32. *NASSA* (*NIOTHA*) *FENESTRATA*, Marrat.

33. *NASSA* (*NIOTHA*) *LIVESCENS*, Phil. Of wide distribution throughout

¹ T.c., p. 44. ² Proc. Malac. Soc., vol. ii, p. 169.

³ Man. Conch., ser. i, vol. iv, p. 36. ⁴ T.c., pp. 34, 35.

the Indian Ocean. As Tryon well observes, *N. livescens* "has the form of *albescens*, with the revolving sculpture of *cremata* and ribs of *concinna*."¹

34. *NASSA* (*NIOTHA*) *VENUSTA*, Dunker. In fine, live condition.

35. *ENGINA ZONATA*, Reeve.

36. *LATRUNCULUS* (*EBURNA*) *AMBULACRUM*, Sby. Extends to the Philippines.

37. *SISTRUM* (*MORULA*) *CHRYSOSTOMA*, Desh. Varies, having either yellow or a lilac interior to the mouth. The headquarters for this appears to be Ceylon. Another distinct species of *Sistrum* we have not determined at present, so covered are the examples with nullipores and *Melobesia*.

38. *OLIVA FUNEBRALIS*, Lam. (= *O. Labradorensis*, Bolten). Extends from Ceylon to the East Indies.

39. *OLIVA INFLATA*, Lam. The range of this species extends from the Red Sea and East African coasts to Ceylon and the Seychelles Islands.

40. *OLIVA IRISANS*, Lam. A bright pretty form of this common Olive; also the variety *Zeylanica*, Lam.

41. *OLIVA ISPIDULA*, L. As variable in the Andamans as elsewhere.

42. *OLIVA LUGUBRIS*, Lam. (= *O. episcopalis*, Lam.). Some of the specimens are small, but all have the characteristic violet interior.

43. *OLIVA LEUCOSTOMA*, DuRoi. Originally described from Mauritian specimens.

44. *OLIVA MAURA*, Lam. Ranges through the whole Pacific Province, and may be considered the type of the genus, which was named from the dark unicolorous form of this species so precisely resembling the fruit of the *Olea Europæa*, L., the Olive of commerce.

45. *OLIVA NOBILIS*, Reeve. A fine variety. Some authors consider this, *O. tremulina*, Lam., and other allied forms, to be all varieties of *O. irisans*, Lam. Whether this be the correct way to dispose of them or not, our theory is, that specific variation amongst the Olividæ is more limited than might be conjectured, and where we can identify a shell with a name, without a shadow of doubt, we think such name ought to stand. It is never difficult to discriminate *O. nobilis* from *O. tremulina*, *O. Mazaris*, *O. ponderosa*, *O. Olympiadina*, or from *O. erythrostoma*.

46. *OLIVA PICTA*, Reeve. A very neat form, and in our estimation specifically distinct from *O. funebris*, Lam.

47. *OLIVA TEXTILINA*, Lam. (= *O. sericea*, Bolten). Another very distinct species, often considered a variety of *O. tremulina*, Lam. Our Andaman specimens are fine and quite typical.

¹ T.c., p. 54.

48. *OLIVA TODOSINA*, Duclos. Perhaps a variety of *O. sidelia*, Duclos. Many specimens, mostly of ochraceous colour, with obscure tessellated pattern, not exhibiting much variation.

49. *OLIVA* (*AGARONIA*) *GIBBOSA*, Born (*O. utriculus*, Gmelin). Ranging from West Africa and India eastward.

We are much indebted to Mr. J. M. Williams for having examined all these *Oliva*, and given us his notes thereupon.

50. *MITRA* (*TURRICULA*) *BRIONÆ*, Sby. A very handsome *Turricula*, with broad fuscous band on the body-whorl, the rest of the shell cinereous-gray. Three specimens were collected by Mr. Henderson.

51. *MITRA* (*TURRICULA*) *CINCTELLA*, Lam. A Molucca and Philippine species extending to the Andamans.

52. *MITRA* (*TURRICULA*) *CURVILIRATA*, Sby. Quite distinct from *M. melongena*, Lam. It is a rare species.

53. *MITRA* (*TURRICULA*) *PLICATA*, Klein. Typical forms, as also two young examples, showing brickdust-red banding, one sent by Mr. Booley, one by Mr. Henderson.

54. *MITRA* (*COSTELLARIA*) *DOHRNI*, A. Ad. One of the group in which *M. mucronata*, Swains., and *M. nodilirata*, A. Ad., are the most conspicuous. Only one example.

55. *MITRA* (*COSTELLARIA*) *INTERSTRIATA*, Sby. Two specimens probably belong to this species, which has no connection with *M. militaris*, Reeve, as Tryon opines.

56. **MITRA* (*COSTELLARIA*) *OBELISCUS*, Reeve. We have not seen G. and H. Nevill's *M. Andamanica*, which presumably is a variety of this, but the shell before us seems quite typical of *M. obeliscus*. It ranges throughout Polynesia.

57. *MITRA* (*COSTELLARIA*) *RECTILATERALIS*, Sby. (= *M. exquisita*, Sby.). A pretty form. Mr. Fulton and Mr. Edgar Smith agree in uniting *M. exquisita* with this species.

58. *MITRA* (*CALLITHEA*) *STIGMATARIA*, Lam. (J. R. H.)

59. *MITRA* (*CHRYSAEME*) *TICAONICA*, Reeve. (J. R. H.)

60. *MITRA* (*PUSIA*) *AFFINIS*, Reeve. Perhaps a variety of *M. aureolata*, Swains., but the Andamanese specimens we have seen are very constant. Distributed throughout Polynesia.

61. *MITRA* (*PUSIA*) *VENUSTULA*, Reeve.

62. *MITRA* (*PUSIA*) *NUCLEOLA*, Lam. Considered by Tryon a mere variety of *M. aureolata*, but the dark transverse lineation is constant. We consider this form to be a distinct species.

63. *MITRA* (*CANCILLA*) *NEXILIS*, Mart. (= *M. filaris*, L.). (J. R. H.)

64. *MITRA* (*CANCILLA*) *CIRCULATA*, Kiener. (J. R. H.)

65. *MITRA* (*CANCILLA*) *INSCULPTA*, A. Ad. A well-marked local form, showing much elegance in its cancellated sculpture.

66. *MARGINELLA* (*GLABELLA*) *SCRIPTA*, Hinds. We are indebted to

Mr. Hugh Fulton for the record of this species, he having received the shell from Mr. Booley direct. Though not abundant, its distribution is wide throughout the Indian and Pacific Oceans.

67. MITRA (CYLINDER) FENESTRATA, Lam.

68. MITRA (CYLINDER) CRENULATA, Chemn. (J. R. H.)

69. MITRA (CYLINDER) UNDULOSA, Reeve. Very fine. (J. R. H.)

70. MITRA (CYLINDER) DACTYLUS, L.

71. FICULA FICOIDES, Lam.

72. FICULA FICUS, L. (= *F. laevigata*, Reeve).

73. NATICA (EUNATICA) ALA-PAPILIONIS, Chemn. (= *N. teniata*, Mke.). A very beautiful form, of extremely wide range, being reported from both hemispheres.

74. NATICA (NEVERITA) ALBUMEN, L. Small examples with opercula.

75. NATICA (MAMILLA) MAMILLA, L.

76. PYRAMIDELLA AURISCATI, L.

77. *TEREBRA AFFINIS, Gray. A remarkably large example, nearly two inches long. The smallest specimens, on the other hand, that we have seen come from the New Caledonian region.

78. TEREBRA ANDAMANICA, n.sp. Pl. III, Fig. 3.

T. testa attenuato-fusiformi, nitida, carneo-rufa, anfractibus 15-16, supra paullum gradatulis, undique longitudinaliter costatis, costis nitidis, laevibus, curvatis, zona suturali conspicua, tumidula, irregulariter brunneo vel albedo variipicta, interstitiis costarum spiraliter striato-sulcatis, ultimo anfractu recto, paullum prolongato, apertura ovata, labro extus tenui. Spec. max., long. 47, lat. 9 mm.; spec. min., long. 35, lat. 7 mm.

Through the kindness of Mr. Edgar Smith we are enabled to particularize this *Terebra* as being nearly allied to *T. alveolata*, Hinds, from Japan and the Straits Settlements, but differing both in form and coarseness of sculpture. It is the *T. specillata*, Reeve (1860); not that of Hinds (1843), figured in Sowerby's *Thesaurus Conch.*, pl. xlv, fig. 116. Fig. 96 of that work really illustrates *T. alveolata*, Hinds (*vide* Index, p. 190). In this confusion, a new name is required for the Andaman species. It has some points in common with both *T. pertusa*, Born, and *T. nebulosa*, Shy., more especially the former. One of the examples collected by Mr. Booley has the operculum, which is unguiform, rufous-brown, shining.

In comparison with *T. pertusa*, Born, the present species differs in form, being broader in proportion to its length, the whorls being more convex and the longitudinal sculpture more elevated; the infra-sutural band also stands out more from the shell, and the brown spotting is not so regular, and the spots are further apart.

79. TEREBRA BABYLONIA, Lam. A handsome *Terebra*, found commonly in the East.

80. TEREBRA CASTA, Hinds. Near *T. hastata*, Gmel., of which species the following named forms also occur: *T. albula*, Hinds, *non* Menke; *T. incolor*, Desh.

81. *TEREBRA CÆRULESCENS*, Lam. Abundant, well marked, and widely distributed.

82. *TEREBRA CHLORATA*, Lam. (= *T. Knorri*, Gray). Handsome, but frequent. Common in Mauritius, Lifu, Malacca, etc.

83. *TEREBRA CANCELLATA*, Quoy.

84. *TEREBRA CONFUSA*, E. A. Smith (= *T. aciculina*, Reeve, pars, non Lam.). Specimens from Singapore are in the British Museum (Natural History).

85. *TEREBRA CRENULATA*, L., var. *BOOLEYI*, n.var. (Pl. III, Fig. 5). A very beautiful variety of this shell we had at first imagined to be new. Warm fawn-colour, upon a flesh-coloured ground, its markings are in longitudinal dashes and flames, irregularly disposed. But little trace of crenulation is observable, the lower whorls being quite smooth, though painted in a tessellate fashion between the sutural bands. The upper whorls, however, are slightly noded.

86. *TEREBRA CELIDONOTA*,¹ n.sp. Pl. III, Fig. 2.

T. testa parva, nitida, multum attenuata, perlævi, omnino candida, anfractibus 12-13, aliquid gradatulis, quorum apicalibus quatuor, vitreis, tumidulis, lævibus, rufotinctis, cæteris albidis leniter longitudinaliter plicato-costulatis, transversim, paululum infra suturas, unisulculoso, sulculo punctato, ultimo anfractu dorsaliter una macula rufa solum decorato, apertura ovata, labro tenui, simplici. Long. 15, lat. 3 mm.

A small, shining, smooth, snowy-white species, conspicuous for a rufous-brown dorsal blotch on the last whorl. We have seen three specimens, all precisely similar. The whorls are slightly gradate, twelve or thirteen in number, with light longitudinal costæ, and a little below the sutures a spiral sulculus, dotted. It comes in the same section of the genus as *T. tenera*, Hinds, *T. nitida*, Hinds, *T. tantilla*, Smith, etc., but is quite distinct from all, as also from any of the numerous varieties of *T. hastata*, Gmelin.

87. *TEREBRA CINGULIFERA*, Lam. A variable shell, with many synonyms, and of wide range. Our specimens are very large. The form *T. lævigata*, Gray, also occurs.

88. *TEREBRA DESHAYESII*, Reeve. A handsome dark flesh-red coloured variety. We can always differentiate this from *T. Babylonia*, Lam., with which, however, Mr. Tryon elects to place it.

89. *TEREBRA LANCEATA*, L. A fine example of this well-known form.

90. *TEREBRA MONILIS*, Quoy & Gaim. Always to be recognized by the white nodules below the sutures.

91. *TEREBRA MYUROS*, Lam.

92. *TEREBRA POLYGYRATA*, Desh. A small species, reported hitherto from Japan and the Philippines.

¹ κηλís, 'a stain': νᾶτος, 'the back.'

93. *TEREBRA RAPHANULA*, Lam. We think this distinct from the forms of *T. Senegalensis*, Lam. The only specimen in this collection is of a dark shining brown variety, most attractive in beauty. It is a rare inhabitant of the East Indian Archipelago, and a welcome addition to the Andamanese Fauna.

94. *TEREBRA SOLIDA*, Desh. This, which may be a variety of *T. hastata*, has been hitherto reported from Japan.

95. *TEREBRA NITIDA*, Hinds, var. *SICYODES*,¹ n.var. Pl. III, Fig. 8.

T. testa aciculata, attenuata, nitida, læte fulvo-brunnea, anfractibus 18, apicalibus?, cæteris longitudinaliter arcte costatis, costis lævibus, nitidis, interstitiis planis, lævissimis, sed apud medium transversim profunde regulariter punctatis, ultimo anfractu recto, paullum producto, apertura angusta, obliqua, labro extus tenui, simplici. Long. 37, lat. 6 mm.

A most interesting form, of a pleasing fulvous-brown colour, shining, longitudinally ribbed, both ribs and interstices quite smooth. Each interstice has a single, deep, ovate puncture placed exactly midway between the ribs and a little above the middle of the whorl. The mouth is narrow, oblique, outer lip simple. The shell is eighteen-whorled, very long and attenuate. The typical form of *T. nitida* is almost white, with a faint tinge of lilac; the apex is brownish.

It is not improbable that *T. cernica*, Sby., from the Mauritius, is also a variety of *T. nitida*.

96. *TEREBRA STRAMINEA*, Gray. A beautiful species, nearly allied to *T. monilis*, Quoy & Gaim., on the one hand, and *T. Babylonica*, Lam., on the other. The revolving striæ and sulcations are beautifully chased. When originally described in 1834, its habitat was considered to be China, but extending to the Philippine Islands; it now, however, proves to have a much wider geographical range. Both the varieties *T. acuta*, Desh., and *T. circumata*, Desh., occur in the Andamans.

97. *TEREBRA TIGRINA*, Gmelin. Beautiful examples, with operculum; but not showing any variation. A not uncommon Polynesian form: we have recently seen it from the Loyalty Islands, New Caledonia.

98. *TEREBRA TRICOLOR*, Sby. The yellow and carnation hue of this pretty shell, with orange-red transverse lines, always serves to distinguish it. It is not a common species.

We have not attempted to divide the species of *Terebra* into subgenera. The genus as a whole is a natural one, and we think the divisions proposed to some extent artificial and needless.

99. *SOLARIUM (HELIACUS) DORSUOSUM*, Hinds. A small shell, apparently having a wide range.

100. **CONUS ANDAMANENSIS*, Smith. An endemic little species.

¹ σικυώδης, 'like a gherkin or cucumber.'

101. *CONUS AULICUS*, L. One specimen with its operculum.
102. *CONUS NOBILIS*, L., var. The small, very beautiful form, with very clearly-cut markings, seems most prevalent in the Andamans. Some fifteen years ago one of the authors inspected at Oxford a large collection of the more showy Andamanese shells in the possession of Miss Milman, sister of the late Bishop of Calcutta, and there were several of this variety of *C. nobilis* amongst many commoner Cones. She then presented him with two beautiful varieties, which are as fine as any dredged by Mr. Booley. In our opinion, this is almost the most select of all the Cones.
103. *CONUS ZONATUS*, L. Another of the more interesting forms of the genus; dredged, though not in any great quantity.
104. *STROMBUS MAURITIANUS*, Lam.
105. *STROMBUS TEREHELLUM*, L. (J. R. H.)
106. *STROMBUS PULCHELLUS*, Reeve.
107. *STROMBUS FLORIDUS*, Lam. (J. R. H. and G. H. B.)
108. *STROMBUS AURIS-DIANÆ*, L., var. *LAMARCKII*, Gray. (J. R. H.)
109. *STROMBUS CANARIUM*, L.
110. *STROMBUS TRICORNIS*, Lam.
111. *STROMBUS VARIABILIS*, L.
112. *DOLIUM PINNATUM*. Mörch. Our specimen is slightly more globose in form, but appears to be a variety of this species.
113. *SERAPHS SUBULATUM*, Lam.
114. *CYPRÆA CLANDESTINA*, L.
115. *CYPRÆA CICERCUA*, L.
116. *CYPRÆA COFFEA*, Sby. (J. R. H.) Considered by some only a variety, though we would give it specific rank.
117. *CYPRÆA HIRUNDO*, L.
118. *CYPRÆA MICRODON*, Gray. In all probability, only a form of *C. fimbriata*, Gmelin, but it is characterized by its very fine, small teeth, and slightly more cylindrical shape.
119. *CYPRÆA NEGLECTA*, Sby. (J. R. H.)
120. *CYPRÆA CRIBRARIA*, L. (J. R. H.)
121. *CYPRÆA CAURICA*, L. Both the typical form and the variety *oblongata*, Melv. (J. R. H. and G. H. B.)
122. *CYPRÆA ASELLUS*, L. (J. R. H.)
123. *CYPRÆA NUCLEUS*, L. (J. R. H.)
124. *CYPRÆA EROSA*, L., and the variety *phagedaina*, Melvill, possessing no lateral spots. (J. R. H.)
125. * *CYPRÆA GANGRENOSA*, (Sol.) Dillwyn. (J. R. H.)
126. *CYPRÆA FLAVEOLA*, L. (J. R. H.)
127. *CYPRÆA CARNEOLA*, L. (J. R. H.)

128. *CYPRÆA STERCUS-MUSCARUM*. (J. R. H.)
 129. *CYPRÆA TABESCENS*, (Sol.) Dillwyn. (J. R. H.)
 130. *CYPRÆA ISABELLA*, L. (J. R. H.)
 131. *CYPRÆA SCURRA*, Chemn. (J. R. H.)
 132. *CASSIS ERINACEUS*. (J. R. H.)
 133. *CANCELLARIA (MERICA) ELEGANS*, Sby.
 134. *CERITHIUM TRAILLII*, Sby. A variety of this well-known shell; perhaps even better known by its var. *alternatum*, Sby., than by the typical form.
 135. *CERITHIUM TUBERCVLATUM*, L.
 136. *CERITHIUM MORUM*, Lam.
 137. *CERITHIUM PURPURASCENS*, Sby. One large specimen.
 138. *CERITHIUM CORALIVM*, Dufr.
 139. *TYMPHANTOMUS FLUVIATILIS*, P. & M.
 140. *PLANAXIS SULCATUS*, Lam. Large specimens of this ubiquitous Eastern species.
 141. *RISELLA LUTEA*, Gould.
 142. *TURRITELLA (ZARIA) DUPLICATA*, L., var. *acutangula*, L.
A common Indian Ocean form.
 143. *MONODONTA LABIO*, L. A common shore-shell.
- There are juvenile specimens of a *Turbo*, an *Astræum*, and *Trochus* (*Polydonta*) in the collection, that are best left unclassified at present.
144. *STOMATIA PHYMOTIS*, Helbling.
 145. *ATYS NAUCUM*, Linn. (J. R. H.)
 146. *HALIOTIS (TEINOTIS) ASININA*, L. We do not consider *Teinotis* to be other than a subgenus.
 147. *RIMULA EXQUISITA*, A. Ad. The type, with which the one very beautiful example forwarded by Mr. Booley agrees precisely, came from the Philippines.
 148. *DENTALIUM APRINUM*, L. Also from the Philippine Islands.
 149. *DENTALIUM POLITUM*, L. (= *eburneum*, Desh.).
 150. *DENTALIUM JAVANUM*, Sby.
- All three represented by fine examples.
151. *ARCA ZEBRA*, Sby. Juvenile examples.
 152. *MODIOLA ALBICOSTATA*, Lam.
 153. *SEPTIFER NICOBARICUS*, Chemn. (= *S. bilocularis*, L.). Fine and typical.
 154. * *PERNA SAMOENSIS*, Baird. Originally described from the Pacific Islands.
 155. *AVICULA INQUINATA*, Reeve? We record this with doubt, as the specimens are very young.

156. *PECTEN ALBOLINEATUS, Sby. Typical specimens of this Philippine Island shell.

157. PECTEN CORALLINOIDES, D'Orb. One or two large specimens showing beautiful coloration. Its headquarters are East Africa.

158. PECTEN FRICATUS, Reeve.

159. PECTEN HISTRIONICUS, Gmel. Ranges from Singapore both east and west. Our specimens are very finely coloured and perfect.

160. PECTEN INÆQUIVALVIS, Sby. A curious and rare form, the valves, as the name implies, being very unequal. Quite typical: three or four examples.

161. PECTEN LENTIGINOSUS, Reeve. Our specimens agree with Reeve's description and figure; it is a Philippine Island form.

162. PECTEN PALLIUM, L. This species seems to have a very wide range throughout the tropical portion of the Eastern hemisphere.

163. PECTEN TESTUDINEUS, Reeve (Pl. III, Fig. 4). A lovely example, larger than the type in the British Museum, and measuring 30×25 mm. As illustrative of the danger in describing small Pectens, we may point out that the recently published¹ *P. Thomasi*, Sby., appears to be the adult form of the species of which smaller specimens were described as *P. corneus*, Sby. (1842), and *P. natans*, Phil. (1845).

164. PECTEN (VOLA) PYXIDATUS, Born. Only small specimens, but unmistakable.

165. PLICATULA IMBRICATA, Mke.

166. LIMA (MANTELLUM) ARCUATA, Sby. Young examples, agreeing better with this than with any other known species.

167. MYTILICARDIA DISTORTA, Reeve. Headquarters in the Red Sea. It seems nearly allied to *M. excavata*, Desh., from Australia.

168. MYTILICARDIA VARIEGATA, Brug. We have received also specimens from Mr. Townsend, from Karachi and the Mekran coast.

169. LAZARIA PICA, Reeve. Apparently a variety of this species, which is recorded from the Philippine Islands.

170. ISOCARDIA VULGARIS, Reeve. With headquarters in China, the range of the section *Meiocardia* extends in a south-westerly direction.

171. LUCINA (CODAKIA) EXASPERATA, Reeve. One perfect example. It is reported also from Honduras and Nicaragua, but this seems doubtful.

172. LUCINA (CODAKIA) SEMPERIANA, Issel (Pl. III, Fig. 1). One specimen in fine condition, measuring 11×10.5 mm.

173. TELLINA (TELLINELLA) HIPPOPOIDEA, Jonas (= *T. striatula*, Sby.). Common.

¹ Proc. Malac. Soc., vol. ii, p. 138, pl. xi, fig. 2.

174. TELLINA (TELLINELLA) PERNA, Spengler.
175. TELLINA (TELLINELLA) STAURELLA, Lam. Beautiful examples, showing much variety in colour-marking; some specimens are almost white. Its headquarters are in the Philippine Islands.
176. TELLINA (PERONÆODERMA) SOWERBYI, Hanley. Only young specimens. The distribution is from Australia north-westwards.
177. TELLINA (ARCOPAGIA) REMIES, L. Quite typical.
178. TELLINA (ARCOPAGIA) CAPSOIDES, Lam. Widely distributed in the Indian Ocean.
179. TELLINA (ARCOPAGIA) CARNICOLOR, Hanley. Appears to be identical with *T. corbis*, Sby., and *T. Strangei*, Desh., the latter from New Zealand.
180. DONAX (LATONA) CUNEATUS, L. (= *D. granosus*, Lam.).
181. DONAX (LATONA) COMPRESSUS, Lam. A large example.
182. MACTRA ACHATINA, Chemn. A common East Indian shell; our examples do not show the radiating colour-markings.
183. PAPHIA GLABRATA, Desh. Extends from Ceylon throughout the Indian Ocean.
184. LIOCONCHA PICTA, Lam. Several examples, showing some variation.
185. LIOCONCHA SULCATINA, Lam. Smoother than *L. trimaculata*, which occurred in the former consignment.
186. CRISTA DIVARICATA, Chemn. Common in the Red Sea, and generally distributed all round Indian coasts.
187. CRISTA GIBBIA, Lam. Large in size.
188. CARYATIS INFLATA, Sby.
189. TAPES DESHAYESII, Hanley.
190. TAPES INDICA, Sby. Only young specimens.
191. TAPES MALABARICA, Chemn. Its headquarters are, as the name implies, on the Malabar Coast; but we have found it in all the Indian and Persian gatherings that we have examined.
192. ANAITIS CALOPHYLLA, Hanley. Small, but highly-coloured examples of this species, whose range is throughout the Indian Ocean.
193. ANAITIS FOLIACEA, Phil.
194. CHIONE LAYARDI, Reeve. This occurs in Bombay (Abercrombie), Karachi (Townsend), Persian Gulf (Townsend), Ceylon, and we have also seen specimens from Aden collected by Commander E. R. Shopland.
195. CHIONE STRIATA, Chemn. Both juvenile and adult.
196. DIONE PHILIPPINARUM, Hanley. Only young examples.
197. DOSINIA HISTRIO, Gmel.
198. DOSINIA LAMINATA, Reeve.

199. *DOSINIA SALEBROSA*, Römer.
All three well known as East Indian forms.
200. *LIBITINA ANGULATA*, Lam.
201. *LIBITINA VELLICATA*, Reeve. Schumacher's genus was established 1817, two years before the Lamarekian *Cypricardia* was proposed (1819).
202. **CARDIUM AUSTRALE*, Sby.
203. *CARDIUM RUGOSUM*, Lam. This, allied to *C. flavosum*, L., from Ceylon, if not quite identical, is common in the Andamans.
204. *LÆVICARDIUM PECTINATUM*, Lam. (= *L. æolicum*, Born). One highly-coloured and very beautiful example. We have heard of this shell being found in the South Atlantic, and believe it has a very wide range, though always considered rare.
205. *HEMICARDIUM CARDISSA*, L.
206. *HEMICARDIUM VIRGO*, Reeve. Small, but very perfect and characteristic. In our opinion, one of the most delicate of the Cardiidae; and very rarely obtained.
207. *PSAMMOBIA PULCHERRIMA*, Desh. Described from the Philippines. A fine example.
208. *PSAMMOBIA ORNATA*, Desh.
209. *ASAPHIS DEFLOKATA*, L. An abundant, almost cosmopolitan, mollusc.
210. *CORBULA CRASSA*, Hinds. Also from Malacca, Singapore, etc.
211. *CULTELLUS CULTELLUS*, L.
212. *CULTELLUS CUMINGIANUS*, Dunker.
- Both of these nearly allied species occur, the latter being the larger and finer. Both have their headquarters in the Philippine Islands.
213. *SOLENOCURTUS (MACHA) PHILIPPINARUM*, Dunker.
214. *SOLENOCURTUS (AZOR) COARCTATUS*, Gmel.
215. *ANATINA LANTERNA*, Lam. Broken examples only. Common on all Indian coasts, especially at Bombay.

EXPLANATION OF PLATE III.

- FIG. 1. *Lucina Semperiana*, Issel.
 „ 2. *Terebra cclidonota*, n.sp.
 „ 3. ——— *Andamanica*, n.sp.
 „ 4. *Pecten testudineus*, Reeve.
 „ 5. *Terebra crenulata* var. *Booleyi*, n.var.
 „ 6. *Eglisia tricarinata*, Adams & Reeve.
 „ 7. *Ancilla Booleyi*, Melv. & Sykes, operculum.
 „ 8. *Terebra nitida* var. *sicyodes*, n.var.
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